



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/588,351	06/07/2000	Roy Childs Flakers	FI996085	8116

7590 01/23/2002

Eric J Franklin
Pollock Vande Sande & Amernick
1990 M Street N W
Washington, DC 20036

EXAMINER

FENTY, JESSE A

ART UNIT	PAPER NUMBER
----------	--------------

2815

DATE MAILED: 01/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/588,351

Applicant(s)

FLAKERS ET AL.

Examiner

Jesse A Fenty

Art Unit

2815

-- The MAILING DATE of this communication appears on the certificate with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 6-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Fukumoto et al. (U.S. Patent No. 5,786,616).

In re claim 6, Fukumoto (claim 2; Figs. 1-11) discloses a semiconductor device, comprising

A pulse discharge circuit connected at least one SOI device; and

Using the pulse discharge circuit to discharge any accumulated potential (i.e. connecting the substrate to ground potential) on the at least one SOI device prior to accessing the device (claim 2).

In re claim 7, Fukumoto discloses the device of claim 6, wherein the circuit comprises a memory circuit.

Art Unit: 2815

In re claim 8, Fukumoto (Fig. 3) discloses the device of claim 6, wherein the circuit comprises:

An input signal;

A delay element (resistor, capacitor) coupled to the input signal; and

An output signal coupled to the input signal, the output signal driving the circuit.

In re claim 9, Fukumoto discloses a plurality of SOI devices wherein each of the plurality of SOI devices has a body, a method for enhancing the performance of the circuit, the method comprising the steps of:

Selecting grounding the body (claim 2) of at least one of the plurality of SOI devices to dissipate electric potential.

In re claim 10, Fukumoto discloses the device of claim 9, wherein the plurality of SOI devices comprises a memory circuit.

In re claim 11, Fukumoto discloses a circuit comprising a plurality of SOI devices wherein each has a body, a method for enhancing the performance of the circuit, comprising:

Providing a pulse discharge circuit having a pulse generator (IN); and

Discharging any accumulated potential on the body of at least one of the plurality of SOI devices by supplying the pulse from the pulse generator to the body of one of the plurality of SOI devices at a given time.

In re claim 12, Fukumoto discloses the device of claim 11, wherein the plurality of SOI devices comprise a memory circuit.

In re claim 13, Fukumoto discloses the device of claim 12, but does not expressly disclose the specific actions to take place after the substrate is discharged. However, terms that simply set

Art Unit: 2815

forth the intended use, a property inherent in or a function, do not differentiate the claimed composition of these elements from those known to prior art.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Voldman (U.S. Patent No. 6,074,899) and Arnold et al. (U.S. Patent No. 5,113,236) disclose semiconductor SOI protection devices of similar structure and operation to the claimed invention.

4.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jesse A Fenty whose telephone number is 703-308-8137. The examiner can normally be reached on 5/4-9 1st Fri. Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lee can be reached on 703-308-1690. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-746-3892 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

JAF
January 17, 2002

Jesse A Fenty
Examiner
Art Unit 2815


EDDIE LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800